

Work Order ID 74109

Wednesday, September 21, 2011 2:56:44 PM



Page 1

Item ID: D350-636-011

Accept



Setup Start



Revision ID:

Stop



Item Name: Skidtube LH

Start Date: 9/21/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 10/7/2011 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

Process Plan:

[Signature]

Date: 11-09-21

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start



Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D2750

F

D3492

C

100

0.00



DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy blue file and type labels per PPP D350-636-011 CHG 006

[Signature] MJS 11-10-12

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

110

0.00



Skidtubes

Skidtubes

Memo

0.00

Skidtubes

1- Pick D2600-3 Bent

2- Deburr FWD and AFT ends, remove bending marks. Scribe batch# inside
AFT end per dwg D27503- Drill pilot holes for blade fitting bolt holes using DT8983. Open to 0.500",
deburr.4- Locate DT8330 off of blade fitting bolt holes and drill pilot holes for blade
fitting

5- Drill only two fwd step holes using DT9616. Ensure proper positioning.

6- Drill pilot holes as per Dwg D2750 sheet 4 (D2750-1 details). Drill using drill
Jig DT8150 & DT8863A for first side only DT8863B for second side (detail B)7- Clecko DT8863B on second side of tube and drill pilot holes for detail B.
SECOND SIDE8-Open up holes for Detail B to 0.375" (4 holes per side) and blade fitting
location holes to 0.500" (total of 4 holes per side) as per dwg D2750. Open up
holes for ground handling and detail C to 0.500" (8 holes per side)9-Drill pilot holes for wearplates as per Dwg D2750 using DT8108 open to
0.297".

10-Open up holes of Detail A to 0.297" (total of 2 holes per side)

B 11/09/26

W/O:		WORK ORDER CHANGES					
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Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp11-Weld D2744 Cap as per Dwg D2750 and QSI 004. Fill grooves in bend left
from bending as per QSI 004
A/R Aluminum Rod batch: ☐ *M118736* *BE 11/10/04*

12-Grind welds flush as per Dwg D2750

DP 11-10-5

120



QC

Quality Control

QC10- Inspect visual per QSI004- ground welds

0.00

Memo

0.00

Sulcalos

130



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

Memo

0.00

*Sulcalos**(FL)*

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Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
140 HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1 Memo	0.00 0.00							<i>DL</i> <i>11/10/05</i>
150 QC Quality Control	QC3- Inspect Part Finish Memo	0.00 0.00							<i>DP</i> <i>11-10-5</i>

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Reference:

Cust Item ID:

Customer:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

160

0.00



Skidtubes

Skidtubes

Memo

0.00

Skidtubes

1-Open up holes of Detail C and ground handling to 0.625" (total of 8 holes per side)
as per dwg D2750.

2-Open up holes of Detail B to 0.750" (total of 4 holes per side)
as per dwg D2750.

3- Open float hole to 0.500" (4 per side)

4-Chamfer holes of Detail B, C, ground handling and float holes per dwg D2750
(welding instructions on sheet 8)

5-Deburr and blow out all chips from inside of tube

6- Prepare tube for welding, remove alodine as required.

7-Bond web D2739 in place as per QSI 015

A/R ☐ ☐ ☐ Sikaflex-291

batch: 118393

exp. date: 12/04/05

8- Weld spacers D3490-1, D3490-3 and D2743 as per dwg D2750 & QSI004
(welding instructions on sheet 8)

A/R ☐ ☐ ☐ Aluminum Rod

batch: 1118736

9- At section AJ-AJ drill out x-bolt spacer to 0.404"

10-Grind welds flush as per Dwg D2750

BB 11/10/05

DL 11/10/06

8E 11/10/07

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Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp11-Spot face ground handling holes section (total of 4 places per side) as per
dwg D2750*3 BE 11/12/07*

12-Deburr holes

170



QC

Quality Control

QC10- Inspect visual per QSI004- ground welds

0.00

8 ulio/4

Memo

0.00

180



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

8 ulio/4

Memo

0.00

(X)

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Customer:

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Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

190

Pressure Wash per QSI005 4.3

0.00



HandFinish

Memo

0.00

Hand Finishing

Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch.

IX Ø M/L 11/10/11

200

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00



Powdercoat

Memo

0.00

Powder Coating

START TIME:

OVEN TEMPERATURE:

FINISH TIME:

*8:15
320 °F
8:45**IX Ø M/L 11/10/12*

210

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

Inspect for foreign object per QSI 024

*1 BX 11-10-12**M118439*

W/O:		WORK ORDER CHANGES					
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Reference:

Cust Item ID:

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start
Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

220



HandFinish

Hand Finishing

HandFinishing

Memo

1- Install inserts as per Dwg D2750

0.00

0.00

1 BR 11-10-12

230



HandFinish

Hand Finishing

HandFinishing

Memo

1-Inspect for Foreign Objects

2-Spray inside of tube with "LPS-3" batch: N/A

3-Install blade fitting D3488-041, wearshoes and ground handling hardware as per dwg D2750

SIKA FLEX 241

BATCH: 118343EXP DATE: 12-5

4-assemble o-ring to plug as per dwg D3492 and apply o-ring lube

A/R 55-o-ring lube batch: 1103485-Coat all exposed fasteners with "LPS Procyon" batch: 114596

0.00

0.00

1 BR 11-10-12

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QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start



Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

240

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

8/10/12

250

Pick Kit

0.00



Packaging

Memo

0.00

Packaging

11/10/12

260

QC4- 100% Inspect kits for completeness

0.00



QC

Memo

0.00

Quality Control

*****ensure antiseize is on AN8C21A bolts*****

11 10 12

W/O:		WORK ORDER CHANGES					
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Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

270

0.00



Packaging

Packaging

Memo

0.00

Packaging

Package as per PPP D350-636-011

[Handwritten signature]
9/24/11

280

0.00



QC21- Final Inspection - Work Order Release

QC

Memo

0.00

Quality Control

[Handwritten signature]
11/10/12

[Handwritten signature]
11-10-12

W/O:		WORK ORDER CHANGES						
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Picklist Print

Wednesday, September 21, 2011 2:56:50 PM

Page 1

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Parent Item: D350-636-011

Parent Item Name: Skidtube LH



Start Date: 9/21/2011

Required Date: 10/7/2011

Start Qty: 1.00

Required Qty: 1.00

Comments:

IPP Rev:I 02.09.25 Rearranged procedure steps KJ
 IPP Rev:J 06-03-23 As per Rev D JLM
 IPP Rev:K 06-07.13 As per dsi9343 EC
 IPP Rev:L 07-07-28 Added SS Wearplates(Rev E) JLM Verf:EC
 IPP Rev:M 08-04-22 update steps 4, 13 DD verified by:EC
 IPP Rev:N 08-09-23 revF as per dwg DD verified by:ec
 IPP Rev:O 09-02-06 apply antiseize on AN8C21A bolts as per PAR09-010
 DD verf:EC IPP Rev:P 10.06.22 revise
 seq110 DD verf:EC IPP Rev:Q 10.10.01 as per IIN revH
 DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3492-1 Plug		Manufactured	No			230	Each	8.0000	8	8			
<div> <div>Location</div> <div>FP 73402</div> <div>69531</div> </div> <div> <div>Loc Qty</div> <div>8</div> <div>8</div> </div> <div> <div>Loc Code</div> <div></div> <div></div> </div> <div>8.</div>													
D3492-3 Plug		Manufactured	No			230	Each	85.0000	8	8			
<div> <div>Location</div> <div>FP 71838</div> <div>72126</div> </div> <div> <div>Loc Qty</div> <div>85</div> <div>76</div> <div>9</div> </div> <div> <div>Loc Code</div> <div></div> <div></div> </div> <div>8.</div>													

BL 11-10-12.

BL 11-10-12.

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Start Date: 9/21/2011

Required Date: 10/7/2011

Start Qty: 1.00

Required Qty: 1.00

NAS1611-010

Purchased

No

230

Each

151.0000

8

8



O-RING



BR 11-10-12

Location

Loc Qty

Loc Code

FP

137

117460

8

118077

1

118612 ✓

128

FP-A

14

110915

14

NAS1149D0863J

Purchased

No

250

Each

144.0000

2

2



WASHER



8

Location

Loc Qty

Loc Code

ST298

144

118078

144

D2744

Manufactured

No

110

Each

73.0000

1

1



Cap



BE 11/10/04

Location

Loc Qty

Loc Code

LG002

17

62715

1

70881

16

WA

56

71861

56

1

74109

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Start Date: 9/21/2011

Required Date: 10/7/2011

Start Qty: 1.00

Required Qty: 1.00

D2600-3-BENT

Manufactured No

110 Each

9.0000

1



Extrusion Bent



1

B 11/09/26 X

Location

Loc Qty

Loc Code

LG

9

66875

8

72153

1

D2743

Manufactured No

160 Each

166.0000

8



Crossbolt Spacer



8

B 11/10/07

Location

Loc Qty

Loc Code

LG

108

69818

5

71839

103

LG001

58

67766

4

68251

54

D2739

Manufactured No

160 Each

9.0000

1



350 I Beam



1

B 11/10/06

Location

Loc Qty

Loc Code

LG

9

70823

1

72154

4

72155

4

D3490-3

Manufactured No

160 Each

10.0000

4



Cross Bolt Spacer



4

B 11/10/07

B 73295 x4

Location

Loc Qty

Loc Code

LG

10

70768

10

Wednesday, September 21, 2011 2:56:50 PM

Shop Packet Print

Page 3

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Start Qty: 1.00

Required Qty: 1.00

D3490-1 Manufactured No

160 Each

82.0000 4 4



Cross Bolt Spacer



BR 11/10/07

Location

Loc Qty

Loc Code

LG	80	
67773	5	
69823	10	
71841	65	<i>4</i>
LG001	2	
62450	2	

ALS4-1032-225 Purchased No

220 Each

1,862.000 38 38



Insert



BR 11-10-12

Location

Loc Qty

Loc Code

ST282	1862	
110768	62	
118386	860	
118966	940	

D3793-3 Manufactured No

230 Each

17.0000 1 1



Wearshoe



BR 11-10-12

Location

Loc Qty

Loc Code

FP018	17	
70813	5	<i>1</i>
72160	12	

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Page 4

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Page 5

Work Order ID: 74109

Parent Item: D350-636-011

Parent Item Name: Skidtube LH

Start Date: 9/21/2011

Required Date: 10/7/2011

Start Qty: 1.00

Required Qty: 1.00

AN8C35A

Purchased

No

230

Each

120.0000

1

1



BOLT

BR 11-10-12

Location

Loc Qty

Loc Code

FP	84	
117511 ✓	18	
118286	66	
FP-A	1	
115960	1	
ST345	34	
117834	34	
ST346	1	
114442	0	
115188	0	
115960	1	

D3793-1

Manufactured

No

230

Each

25.0000

1

1



Wearshoe

BR 11-10-12

Location

Loc Qty

Loc Code

FP001	14	
73422 ✓	14	
FP018	11	
70781	11	

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Page 5

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr.	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

Picklist Print

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Page 6

Work Order ID: 74109

Parent Item: D350-636-011

Parent Item Name: Skidtube LH

Start Date: 9/21/2011

Required Date: 10/7/2011

Start Qty: 1.00

Required Qty: 1.00

D3488-041

Manufactured No

230 Each

21.0000 1 1



Blade Fitting Assembly, LH



BR 11-10-12

Location

Loc Qty

Loc Code

FP

11

69903 ✓

11

FP007

1

61689

1

FP008

9

67788

1

71887

8

D3794-3

Manufactured No

230 Each

8.0000 1 1



Gasket



BR 11-10-12

Location

Loc Qty

Loc Code

FP018

8

70812 ✓

8

AN6C44A

Purchased No

230 Each

111.0000 4 4



BOLT



BR 11-10-12

Location

Loc Qty

Loc Code

FG

2

103964

2

ST344

109

118332 ✓

19

118387 ✓

50

118985

40

3

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Page 6

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

Picklist Print

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Page 7

Work Order ID: 74109

Parent Item: D350-636-011

Parent Item Name: Skidtube LH

Start Date: 9/21/2011

Required Date: 10/7/2011

Start Qty: 1.00

Required Qty: 1.00

MS21083C8

Purchased

No

230

Each

86.0000

1

1



NUT



BR 11-10-12

Location

Loc Qty

Loc Code

FP-B

1

115884

1

ST293

13

118077 ✓

13

ST303

72

115884

0

118354

22

118614

50

D3536-25

Manufactured

No

230

Each

12.0000

1

1



Gasket



BR 11-10-12

Location

Loc Qty

Loc Code

FP012

12

70780

12

D3631-1

Manufactured

No

230

Each

163.0000

8

8



Washer



BR 11-10-12

Location

Loc Qty

Loc Code

ST072

163

68062 ✓

163

8.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

Picklist Print

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Page 8

Work Order ID: 74109

Parent Item: D350-636-011

Parent Item Name: Skidtube LH

Start Date: 9/21/2011

Required Date: 10/7/2011

Start Qty: 1.00

Required Qty: 1.00

D3791-1 Manufactured No 230 Each 19.0000 1 1



Wearplate



BL 11-10-12

Location Loc Qty Loc Code

FP017 7

62239 2

69282 ✓ 5

FP17 12

72158 12

AN960C10L NAS1149C0332 ✓ Purchased No



washer

D2745



Bushing

118354.



38. BL 11-10-12

Manufactured No 230 Each 221.0000 8 8



BL 11-10-12

Location Loc Qty Loc Code

FP-A 59

69529 ✓ 59

ST023 162

71835 162

8.

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Shop Packet Print

Page 8

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

Picklist Print

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Page 9

Work Order ID: 74109



Parent Item: D350-636-011



Parent Item Name: Skidtube LH

Start Date: 9/21/2011

Required Date: 10/7/2011

Start Qty: 1.00

Required Qty: 1.00

AN3C5A

Purchased

No

230

Each

1,058.000

34

34



Bolt



BR 11-10-12

Location

Loc Qty

Loc Code

FP-A

7

115835

7

ST350

1051

116419

28

117343 ✓

352

117764

169

117872

2

118451

500

34

D3537-1

Manufactured

No

230

Each

190.0000

3

3



Wearpad



BR 11-10-12

Location

Loc Qty

Loc Code

FP001

180

72124

60

73394

60

73395 ✓

60

FP016

3

68944

0

70687

3

FP017

7

69817

5

70686

2

3

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

Picklist Print

Wednesday, September 21, 2011 2:56:52 PM

Work Order ID: 74109

Parent Item: D350-636-011

Parent Item Name: Skidtube LH

Start Date: 9/21/2011

Required Date: 10/7/2011

Start Qty: 1.00

Required Qty: 1.00

NAS1149C0832R

Purchased

No

230

Each

352.0000

1

1



WASHER



BL 11-10-12

Location

Loc Qty

Loc Code

FP-B

23

114915 ✓

23

ST297

329

114915

329

1

AN3C6A

*Purchased

No

230

Each

280.0000

4

4



BOLT



BL 11-10-12

Location

Loc Qty

Loc Code

FP-A

1

111982

1

ST351

279

111982

2

116419

23

116549

2

116704

12

117619

10

117688

1

117872

29

118422 ✓

200

4

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

Picklist Print

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Page 11

Work Order ID: 74109

Parent Item: D350-636-011

Parent Item Name: Skidtube LH

Start Date: 9/21/2011

Required Date: 10/7/2011

Start Qty: 1.00

Required Qty: 1.00

NAS1611-013

Purchased

No

230

Each

140.0000

8

8



BR 11-10-12

O-RING

Location

Loc Qty

Loc Code

FP

55

117291

2

117887

53

FP-A

85

116582

5

118384 ✓

80

8.

D3535-25

Manufactured

No

230

Each

22.0000

1

1



BR 11-10-12

Wearshoe

Location

Loc Qty

Loc Code

FP018

22

62233

1

69743 ✓

8

73424

13

1

D3794-1

Manufactured

No

230

Each

17.0000

1

1



BR 11-10-12

Gasket

Location

Loc Qty

Loc Code

FP010

17

70779 ✓

17

1

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Page 11

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Work Order ID: 74109

Parent Item: D350-636-011

Parent Item Name: Skidtube LH

Start Date: 9/21/2011

Required Date: 10/7/2011

Start Qty: 1.00

Required Qty: 1.00

MS21043-6

Purchased

No

230

Each

533.0000

4

4



NUT



BR 11-10-12

Location

Loc Qty

Loc Code

FG

20

103693

20

ST301

513

112314 ✓

303

117887

10

118384

200

4.

D3493-1

Manufactured

No

250

Each

69.0000

2



Washer



2

Location

Loc Qty

Loc Code

ST062

69

70697

31

71846

38

2

MS21083C8

Purchased

No

250

Each

86.0000

2



NUT



11/10/12 2

Location

Loc Qty

Loc Code

FP-B

1

115884

1

ST293

13

118077

13

ST303

72

115884

0

118354

22

118614

50

2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Page 13

Work Order ID: 74109

Parent Item: D350-636-011

Parent Item Name: Skidtube LH

Start Date: 9/21/2011

Required Date: 10/7/2011

Start Qty: 1.00

Required Qty: 1.00

AN8C21A

Purchased

No

250

Each

81.0000

2



BOLT

Location

Loc Qty

Loc Code

ST345

81

118045

31

118758

50

NAS1515H3L

Purchased

No

230

Each

156.0000

4



WASHER

Location

Loc Qty

Loc Code

FG

40

102472

40

ST277

116

113362

57

118686 ✓

59

D2741

Manufactured

No

250

Each

33.0000

1



Blade, 350 Skidtube

Location

Loc Qty

Loc Code

ST466

33

70667

33

D3532-1

Manufactured

No

250

Each

15.0000

2



Spacer

Location

Loc Qty

Loc Code

ST065

15

69895

15

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

QTY -041	QTY -042	QTY -043	QTY -044	PART NUMBER	DESCRIPTION
X				D2750-041	350 SKIDTUBE ASSEMBLY, LH
	X			D2750-042	350 SKIDTUBE ASSEMBLY, RH
		X		D2750-043	350 SKIDTUBE ASSEMBLY, LH
			X	D2750-044	350 SKIDTUBE ASSEMBLY, RH
1	1	1	1	D2739	WEB
8	8	8	8	D2743	SPACER
1	1	1	1	D2744	CAP
8	8	8	8	D2745	BUSHING
1				D2750-1	SKIDTUBE WELDMENT, LH
	1			D2750-2	SKIDTUBE WELDMENT, RH
		1		D2750-3	SKIDTUBE WELDMENT, LH
			1	D2750-4	SKIDTUBE WELDMENT, RH
1		1		D3488-041	BLADE FITTING, LH
	1		1	D3488-042	BLADE FITTING, RH
4	4	4	4	D3490-1	SPACER
4	4			D3490-3	SPACER
		4	4	D3490-5	SPACER
8	8	8	8	D3492-041	PLUG ASSEMBLY
8	8			D3492-043	PLUG ASSEMBLY
		8	8	D3492-045	PLUG ASSEMBLY
1	1	1	1	D3535-25	WEARSHOE
1	1	1	1	D3536-25	GASKET
3	3	3	3	D3537-1	WEARPAD
8	8	8	8	D3631-1	WASHER
1	1	1	1	D3791-1	WEARPLATE
1	1	1	1	D3793-1	WEARSHOE
1	1	1	1	D3793-3	WEARSHOE
1	1	1	1	D3794-1	GASKET
1	1	1	1	D3794-3	GASKET
38	38	38	38	ALS4-1032-225	INSERT (OR ALS7-1032-225, AKS4-1032-225, AELS-1032-225)
34	34	34	34	AN3C5A	BOLT
4	4	4	4	AN3C6A	BOLT
4	4	4	4	AN6C44A	BOLT
1	1	1	1	AN8C35A	BOLT
38	38	38	38	AN960C10L	WASHER
1	1	1	1	AN960C816L	WASHER
4	4	4	4	MS21043-6	NUT
1	1	1	1	MS21083C8	NUT
4	4	4	4	NAS1515H3L	WASHER

GENERAL NOTES:

- MATERIAL: MAKE D2750-1/-2/-3/-4 FROM D2600-3 EXTRUSION (INITIAL LENGTH = 120.0).
- FINISH:
ACID ETCH, ALONDE ASSEMBLY PER DART QSI 005 4.1 PRIOR TO INSTALLING D2739 WEB.
POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED TO 1.0 ABOVE SKIDTUBE CENTER-LINE PER DART 005 4.4 (OPTIONAL).
- TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- UNITS: INCHES UNLESS OTHERWISE NOTED
- BREAK SHARP EDGES: N/A
- IDENTIFICATION: N/A
- WEIGHT: D2750-041/-042/-043/-044 = 26.5 LBS
- WELD PER DART QSI 004
- INSTALL ALS4-1032-225 INSERTS AFTER FINISH AS INDICATED. DRILL 'F' SIZE HOLES ($\phi 0.297$) FOR WEARSHOE INSERTS
- FINAL CONFIGURATION SHOULD HAVE THE FOLLOWING MINIMUM MECHANICAL PROPERTIES:
MINIMUM YIELD TENSILE STRENGTH = 35 KSI
MINIMUM ULTIMATE TENSILE STRENGTH = 38 KSI
- SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND AFTER INSTALLATION OF INSERTS.
COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF
POWDER COATING WITH MEK DEGREASER.
- SPACER AND PLUG INSTALLED SAME AS SECTION AJ-AJ EXCEPT HORIZONTAL
- SPACER AND PLUG INSTALLED SAME AS SECTION AP-AP EXCEPT HORIZONTAL

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 74109
011-09-21

RELEASED

F	INCORPORATE DSI 9413; QTY (3) D3537-1 WAS QTY (5) (ZN C8-1); D3791-1/-3 REPLACES D3535-13/-35 (ZN C8-1); D3794-1/-3 REPLACES D3536-13/-35 (ZN B8-1); ADD D3791-1 (ZN C8-1); WEARSHOE HOLES UNDER FWD/AFT SADDLE REMOVED (8 PL). WEARSHOE HARDWARE QTY UPDATED (ZN B8-1); D3488-041/-042 HARDWARE UPDATED (ZN C1-8, 9, 10, 11); ADD NOTE 12 AND 13 (ZN A6-1); REASON: REF. NCR 08-043	PH	08.07.16
E	CHANGE TO STAINLESS STEEL WEARPLATES; ADD RUBBER GASKETS, CHANGE INSERTS, ADD D3631-1; REMOVE QTY (38) NAS1515H3L; REMOVE QTY (10) NAS1515H8L; REMOVE D2741, QTY (2) AN960C816; REMOVE QTY (2) MS21083C8	CB	07.05.17
D	ADD HOLES AND SPACERS FOR APICAL FLOATS; INCORPORATE DEO 9133/9157	PH	06.01.05
C	ADD D2750-3/D2750-4; INCORPORATE D2738 AND D2740	CP	98.11.18
B	CHANGE MS24694-S293 TO AN8-16A	CP	98.09.01
A	NEW ISSUE	DS	98.04.16
REV.	DESCRIPTION	BY	DATE
DESIGN	DA	DART AEROSPACE USA, INC.	
DRAWN	RAH	PORT HADLOCK, WA	
CHECKED	AS	DRAWING NO.	REV. F
MFG. APPR.	AS	D2750	SHEET 1 OF 11
APPROVED	AS	TITLE	SCALE
DE APPR.	AS	350 SKIDTUBE ASSEMBLY	NTS
DATE	08.07.16	COPYRIGHT © 1998 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE REPRODUCED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

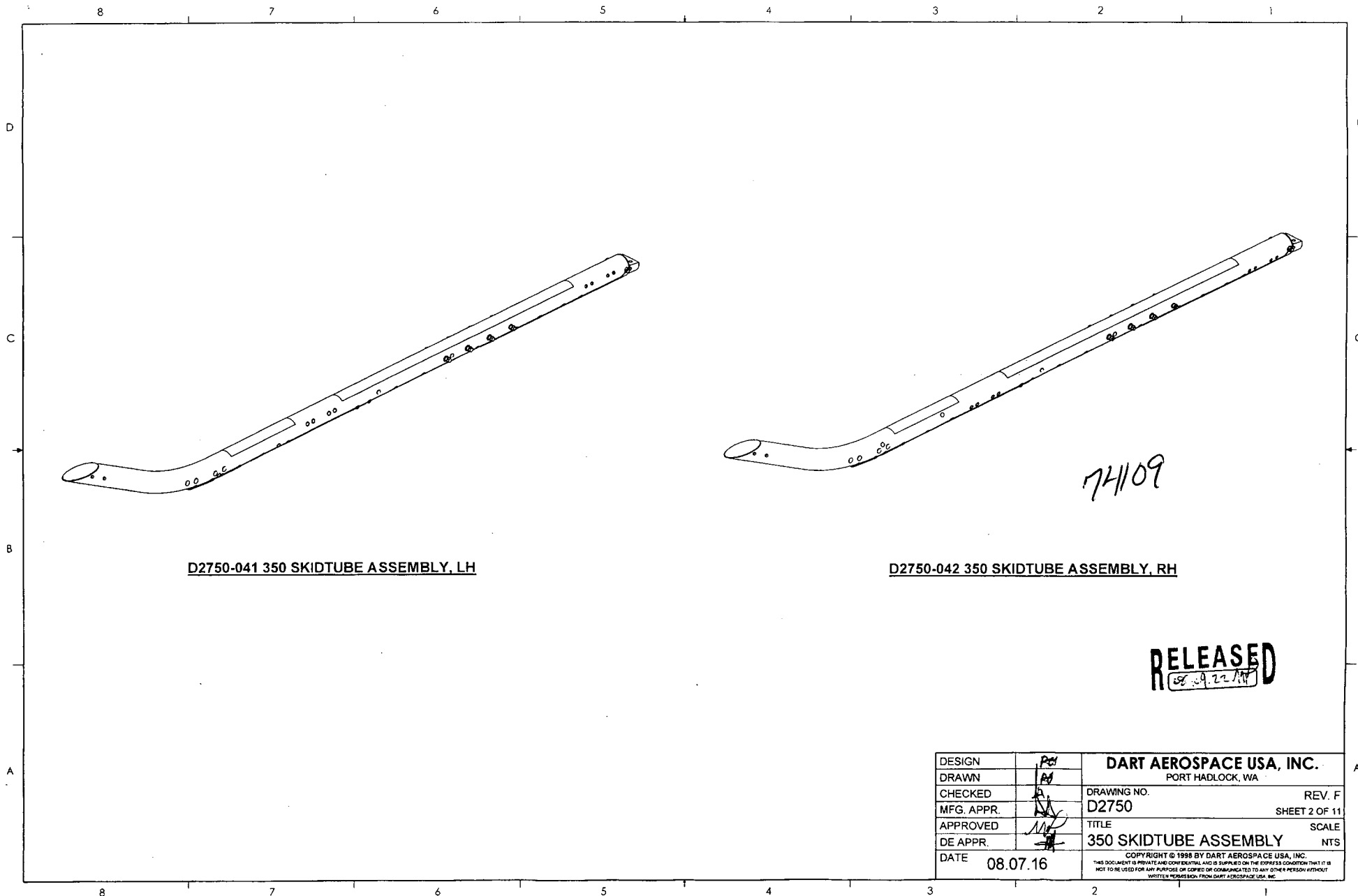
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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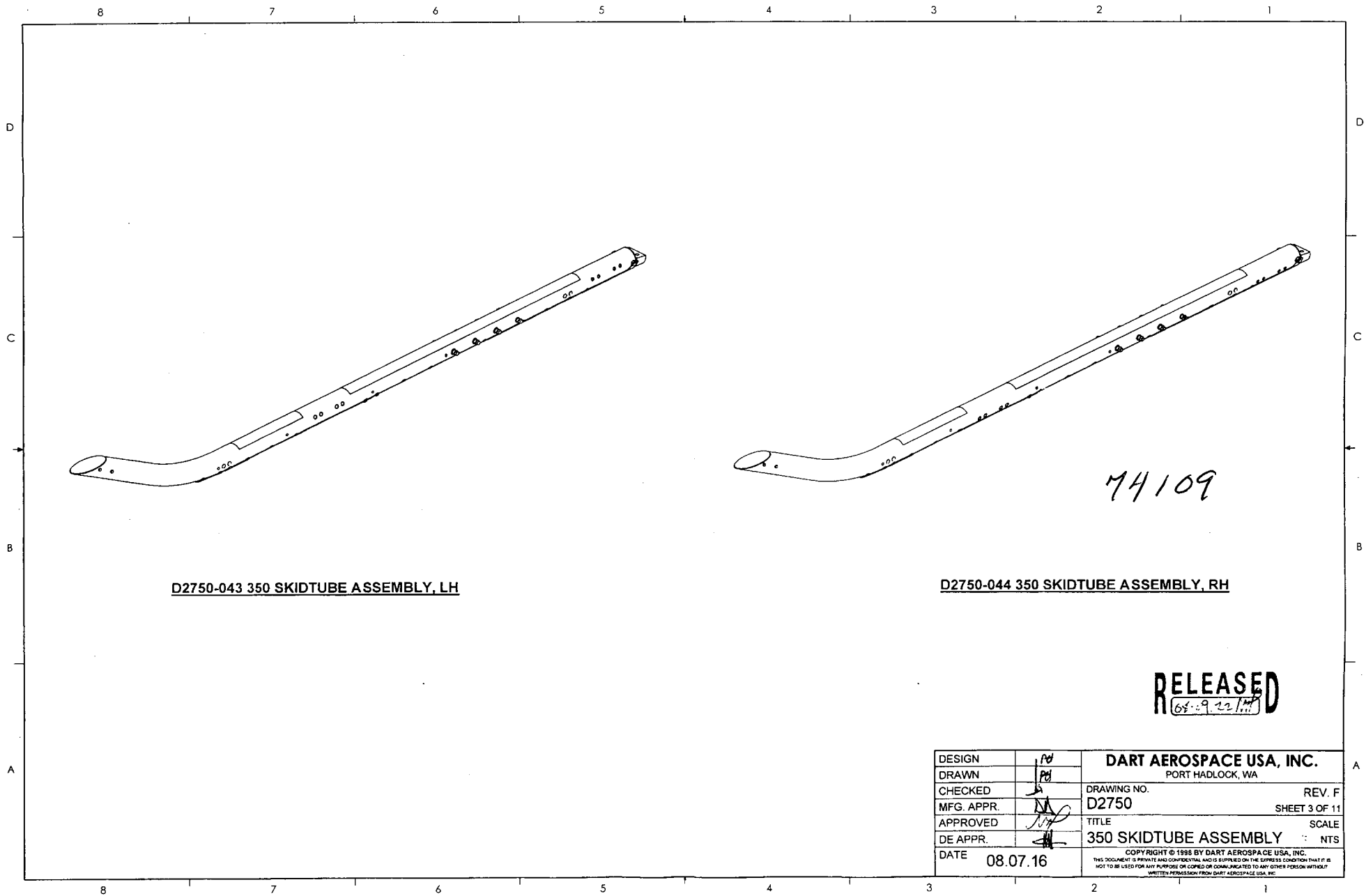
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



74109

RELEASED
68-9-12-111

DESIGN	PD	DART AEROSPACE USA, INC.	
DRAWN	PD	PORT HADLOCK, WA	
CHECKED	SA	DRAWING NO. D2750	REV. F
MFG. APPR.	SA	SHEET 3 OF 11	
APPROVED	SA	TITLE	SCALE
DE APPR.	SA	350 SKIDTUBE ASSEMBLY	
DATE	08.07.16	NTS	

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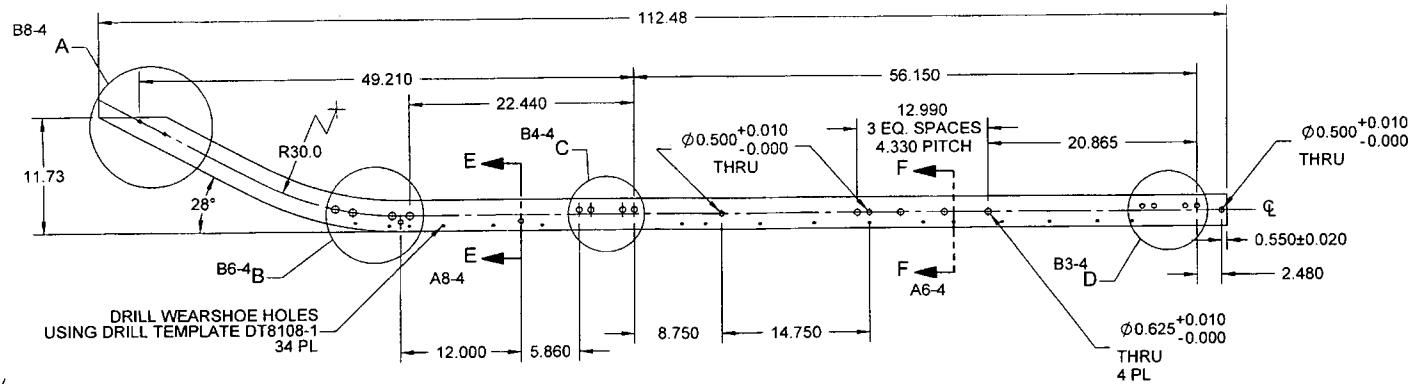
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

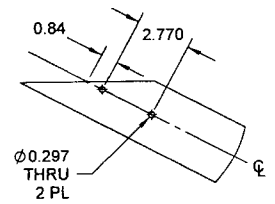
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

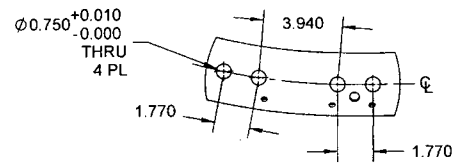
NOTE: Date & initial all entries



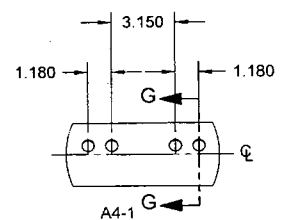
D2750-1 LH SKIDTUBE



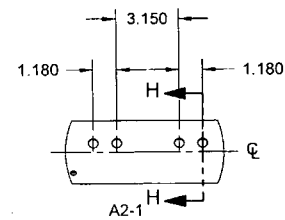
DETAIL A
SCALE 2X



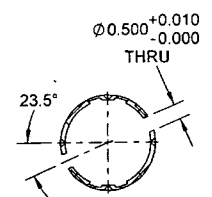
DETAIL B
SCALE 2X



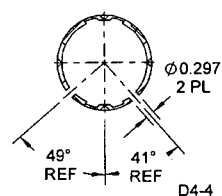
DETAIL C
SCALE 2X



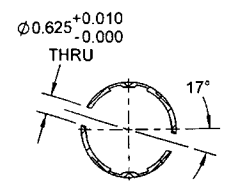
DETAIL D
SCALE 2X



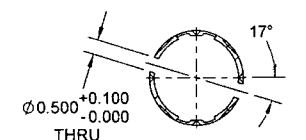
SECTION E-E
SCALE 3X, 2 PL



SECTION F-F
SCALE 3X, 17 PL



SECTION G-G
SCALE 3X, 4 PL



SECTION H-H
SCALE 3X, 4 PL

74109

RELEASED

DESIGN	IPB	DART AEROSPACE USA, INC.	
DRAWN	IPB	PORT HADLOCK, WA	
CHECKED		DRAWING NO. D2750	REV. F
MFG. APPR.		SHEET 4 OF 11	
APPROVED		TITLE 350 SKIDTUBE ASSEMBLY	SCALE
DE APPR.		NTS	
DATE	08.07.16	<small>COPYRIGHT © 1998 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small>	

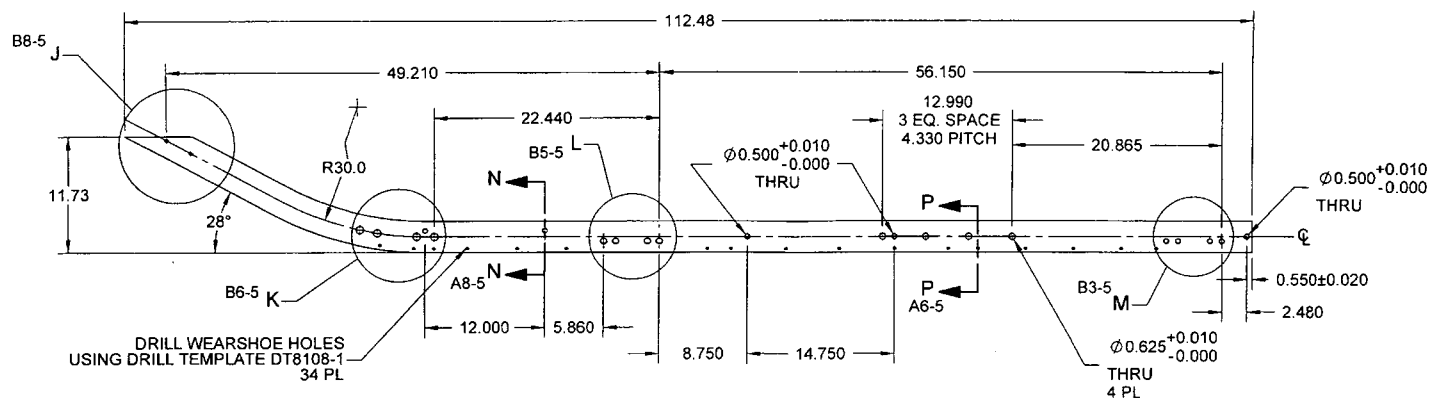
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

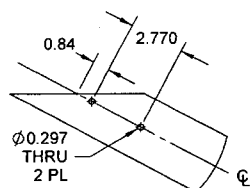
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NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

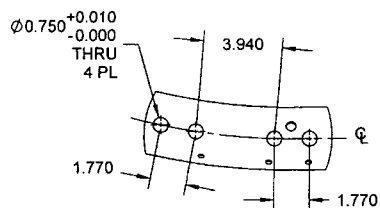
NOTE: Date & initial all entries



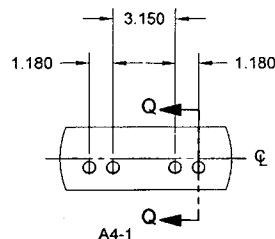
D2750-2 RH SKIDTUBE



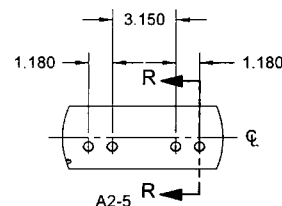
DETAIL J
SCALE 2X



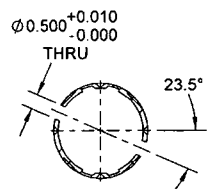
DETAIL K
SCALE 2X



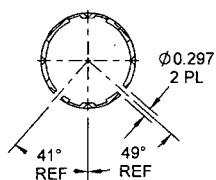
DETAIL L
SCALE 2X



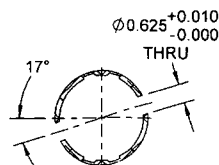
DETAIL M
SCALE 2X



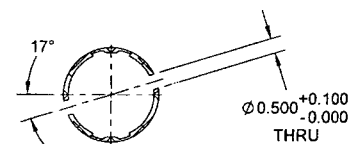
SECTION N-N
SCALE 3X, 2 PL



SECTION P-P
SCALE 3X, 17 PL



SECTION Q-Q
SCALE 3X, 4 PL



SECTION R-R
SCALE 3X, 4 PL

DESIGN	REV	DART AEROSPACE USA, INC.	
DRAWN	REV	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D2750	SHEET 5 OF 11
APPROVED		TITLE	SCALE
DE APPR.		350 SKIDTUBE ASSEMBLY	NTS
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74109

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

8

7

6

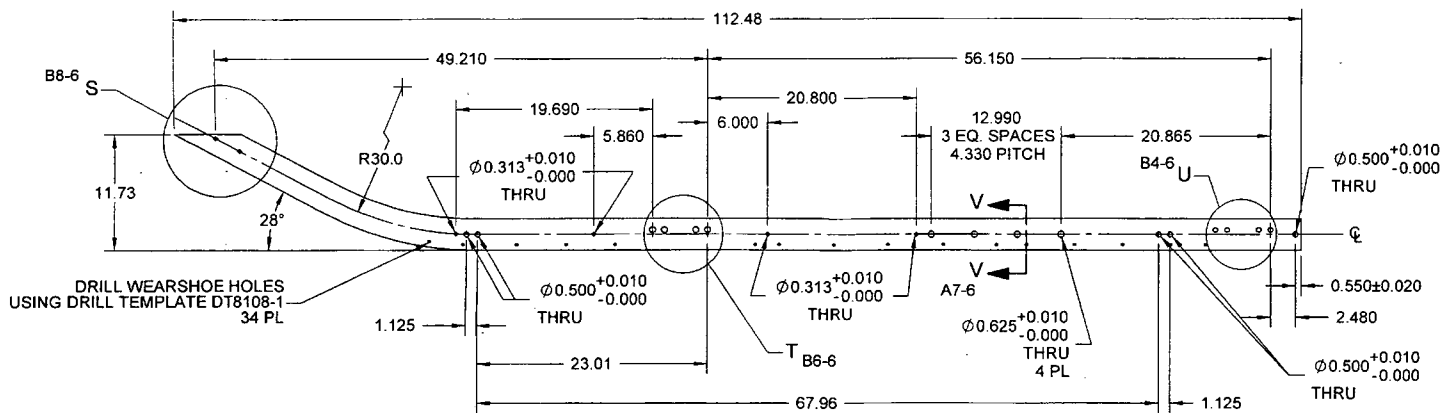
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4

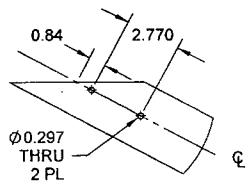
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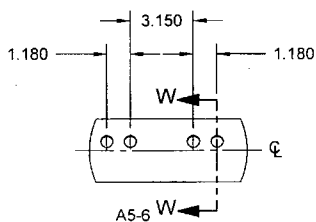
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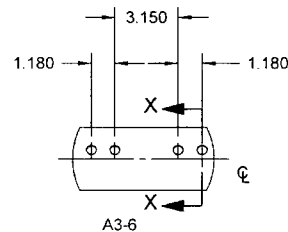
D2750-3 LH SKIDTUBE



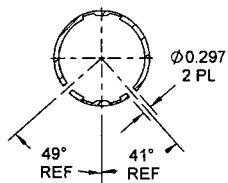
DETAIL S
SCALE 2X



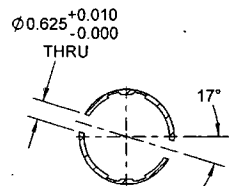
DETAIL T
SCALE 2X



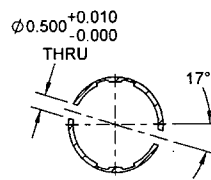
DETAIL U
SCALE 2X



SECTION V-V
SCALE 3X, 17 PL



SECTION W-W
SCALE 3X, 4 PL



SECTION X-X
SCALE 3X, 4 PL

74/09

RELEASED
08-22-11

DESIGN		DART AEROSPACE USA, INC.
DRAWN		PORT HADLOCK, WA
CHECKED		DRAWING NO. D2750
MFG. APPR.		REV. F
APPROVED		SHEET 6 OF 11
DE APPR.		TITLE 350 SKIDTUBE ASSEMBLY
DATE	08.07.16	SCALE NTS

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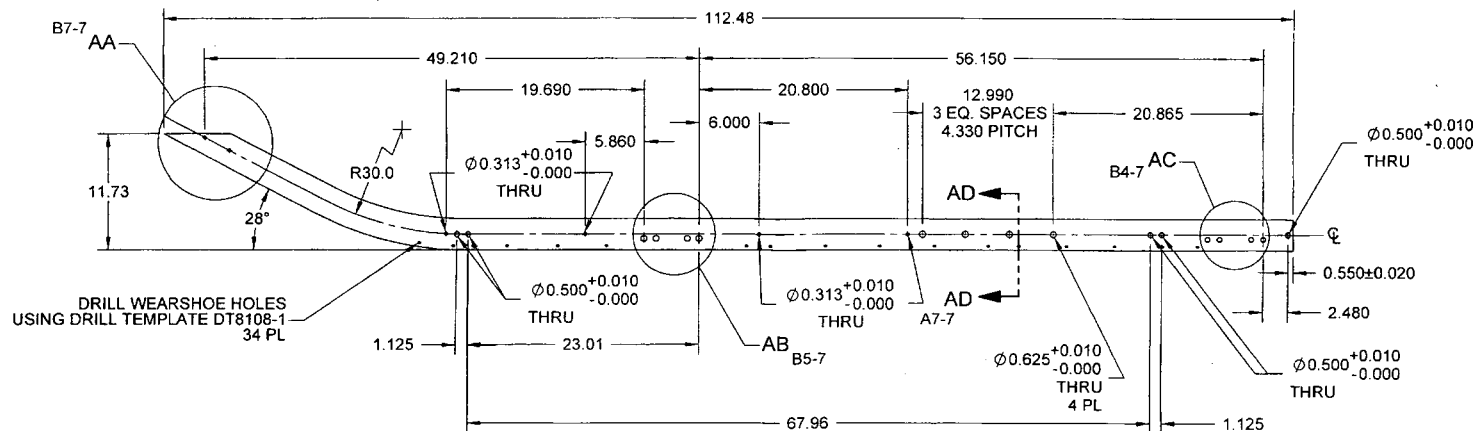
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

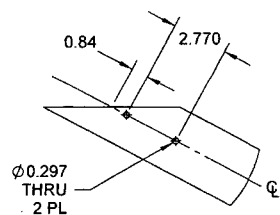
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NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

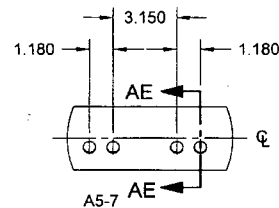
NOTE: Date & initial all entries



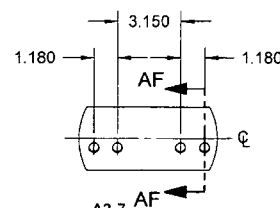
D2750-4 RH SKIDTUBE



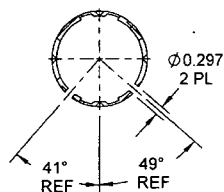
DETAIL AA
SCALE 2X



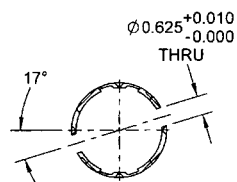
DETAIL AB
SCALE 2X



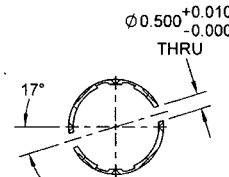
DETAIL AC
SCALE 2X



SECTION AD-AD
SCALE 3X, 17 PL



SECTION AE-AE
SCALE 3X, 4 PL



SECTION AF-AF
SCALE 3X, 4 PL

74109

RELEASED

DESIGN	<i>PA</i>	DART AEROSPACE USA, INC.	
DRAWN	<i>PA</i>	PORT HADLOCK, WA	
CHECKED	<i>PA</i>	DRAWING NO.	REV. F
MFG. APPR.	<i>PA</i>	D2750	SHEET 7 OF 11
APPROVED	<i>PA</i>	TITLE	SCALE
DE APPR.	<i>PA</i>	350 SKIDTUBE ASSEMBLY	NTS
DATE	08.07.16	<small>COPYRIGHT © 1998 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small>	

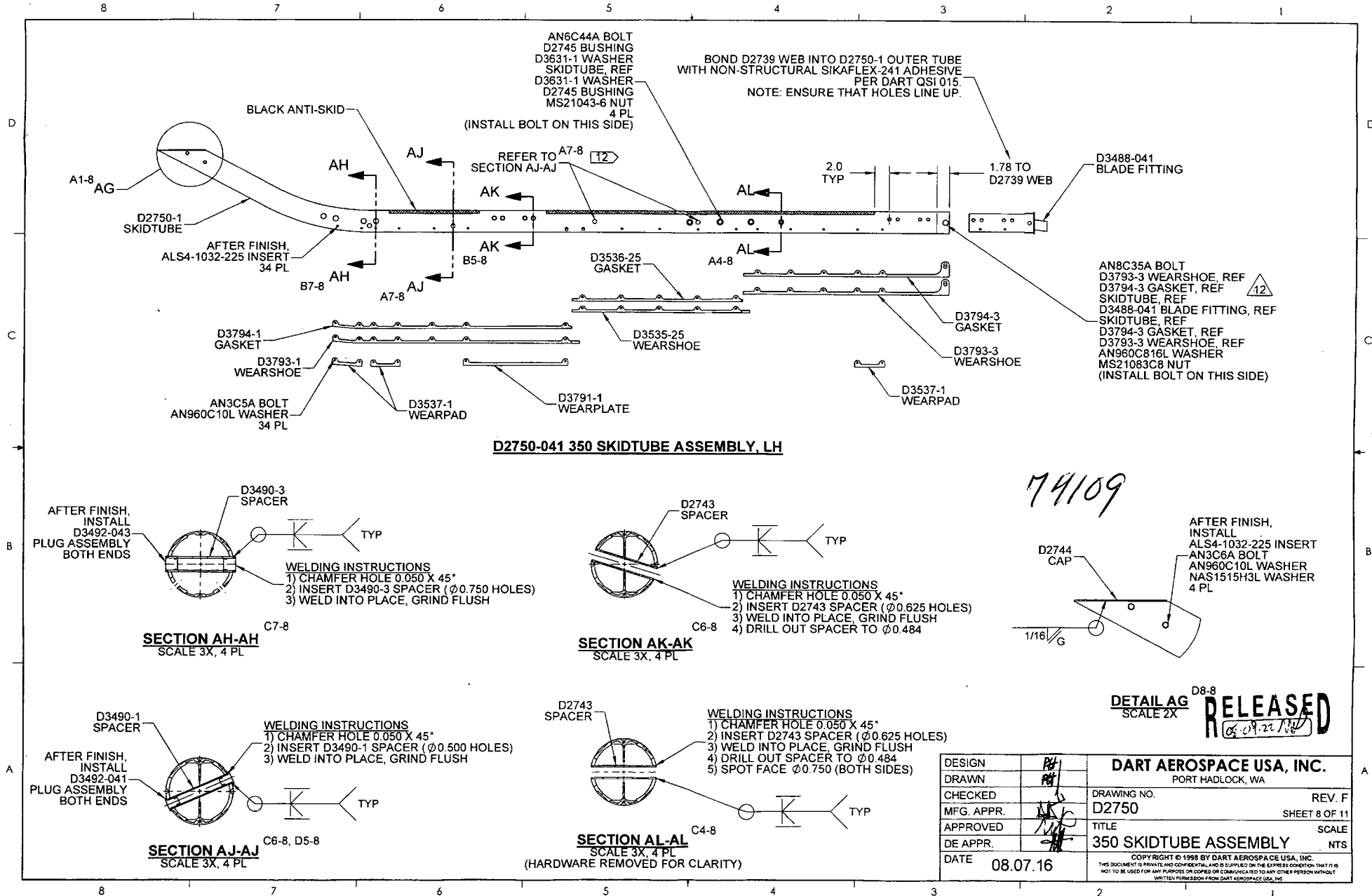
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

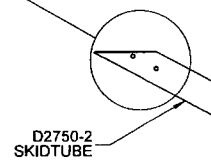
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

8 7 6 5 4 3 2 1

A1-9 AM



AFTER FINISH, ALS4-1032-225 INSERT 34 PL

BLACK ANTI-SKID

(INSTALL NUT ON THIS SIDE)
REFER TO SECTION AP-AP

BOND D2739 WEB INTO D2750-2 OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241 ADHESIVE PER DART QSI 015. NOTE: ENSURE THAT HOLES LINE UP.

1.78 TO D2739 WEB

D3488-042 BLADE FITTING

AN8C35A BOLT
D3793-3 WEARSHOE, REF
D3794-3 GASKET, REF
D3488-042 BLADE FITTING, REF
D3794-3 GASKET, REF
D3793-3 WEARSHOE, REF
AN960C816L WASHER
MS21083C8 NUT
(INSTALL NUT ON THIS SIDE)

AN3C5A BOLT
AN960C10L WASHER
34 PL

D3794-1 GASKET

D3793-1 WEARSHOE

D3537-1 WEARPAD

D3791-1 WEARPLATE

D3536-25 GASKET

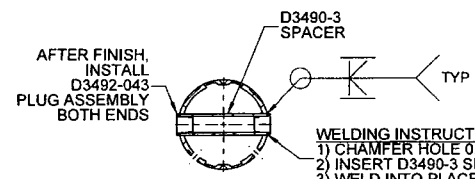
D3535-25 WEARSHOE

D3794-3 GASKET

D3793-3 WEARSHOE

D3537-1 WEARPAD

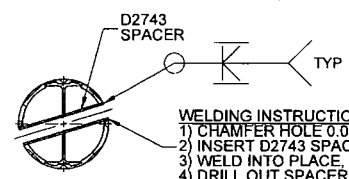
D2750-042 350 SKIDTUBE ASSEMBLY, RH



AFTER FINISH, INSTALL D3492-043 PLUG ASSEMBLY BOTH ENDS

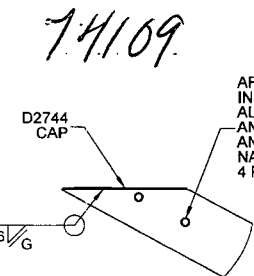
WELDING INSTRUCTIONS
1) CHAMFER HOLE 0.050 X 45°
2) INSERT D3490-3 SPACER (Ø 0.750 HOLES)
3) WELD INTO PLACE, GRIND FLUSH

SECTION AN-AN
SCALE 3X, 4 PL



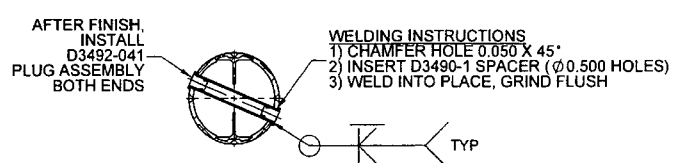
WELDING INSTRUCTIONS
1) CHAMFER HOLE 0.050 X 45°
2) INSERT D2743 SPACER (Ø 0.625 HOLES)
3) WELD INTO PLACE, GRIND FLUSH
4) DRILL OUT SPACER TO Ø 0.484

SECTION AQ-AQ
SCALE 3X, 4 PL



AFTER FINISH, INSTALL ALS4-1032-225 INSERT AN3C6A BOLT AN960C10L WASHER NAS1515H3L WASHER 4 PL

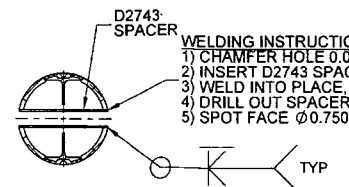
DETAIL AM
SCALE 2X



AFTER FINISH, INSTALL D3492-041 PLUG ASSEMBLY BOTH ENDS

WELDING INSTRUCTIONS
1) CHAMFER HOLE 0.050 X 45°
2) INSERT D3490-3 SPACER (Ø 0.500 HOLES)
3) WELD INTO PLACE, GRIND FLUSH

SECTION AP-AP
SCALE 3X, 4 PL



WELDING INSTRUCTIONS
1) CHAMFER HOLE 0.050 X 45°
2) INSERT D2743 SPACER (Ø 0.625 HOLES)
3) WELD INTO PLACE, GRIND FLUSH
4) DRILL OUT SPACER TO Ø 0.484
5) SPOT FACE Ø 0.750 (BOTH SIDES)

SECTION AR-AR
SCALE 3X, 4 PL
(HARDWARE REMOVED FOR CLARITY)

DESIGN	PH	DART AEROSPACE USA, INC.	REV. F
DRAWN	PH	PORT HADLOCK, VA	
CHECKED	PH	DRAWING NO.	SHEET 9 OF 11
MFG. APPR.	MD	D2750	SCALE
APPROVED	PH	TITLE	350 SKIDTUBE ASSEMBLY
DE APPR.	PH	DATE	08.07.16
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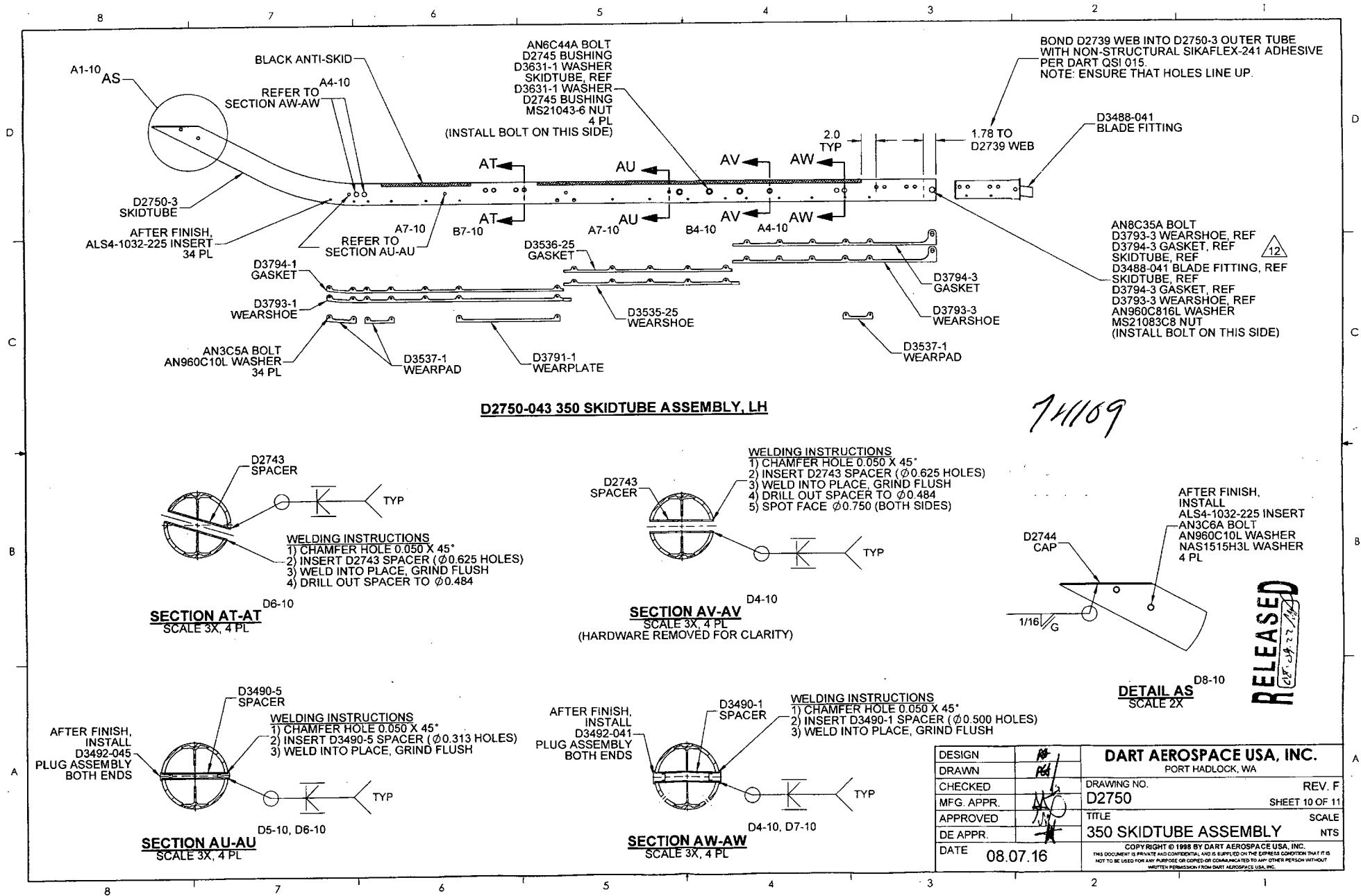
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

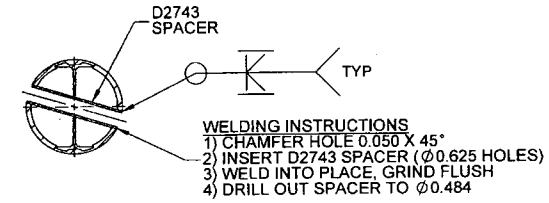
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

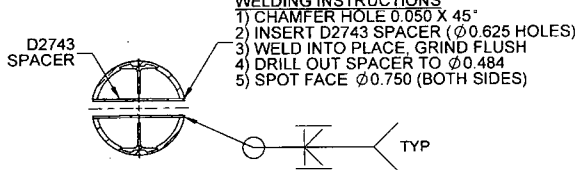


D2750-043 350 SKIDTUBE ASSEMBLY, LH

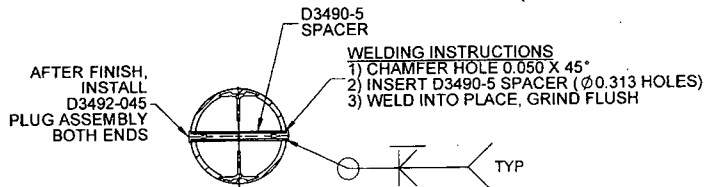
741109



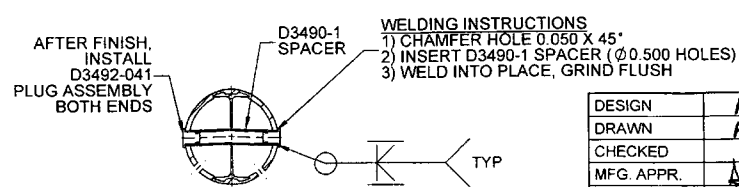
SECTION AT-AT
SCALE 3X, 4 PL



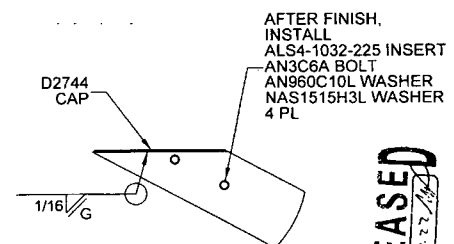
SECTION AV-AV
SCALE 3X, 4 PL
(HARDWARE REMOVED FOR CLARITY)



SECTION AU-AU
SCALE 3X, 4 PL



SECTION AW-AW
SCALE 3X, 4 PL



DETAIL AS
SCALE 2X

DESIGN	REV. F	DART AEROSPACE USA, INC.	
DRAWN	REV. F	PORT HADLOCK, WA	
CHECKED	D2750	DRAWING NO.	REV. F
MFG APPR.		SHEET 10 OF 11	
APPROVED		TITLE	SCALE
DE APPR.		350 SKIDTUBE ASSEMBLY	NTS
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RELEASED
2017-04-27/10/17

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

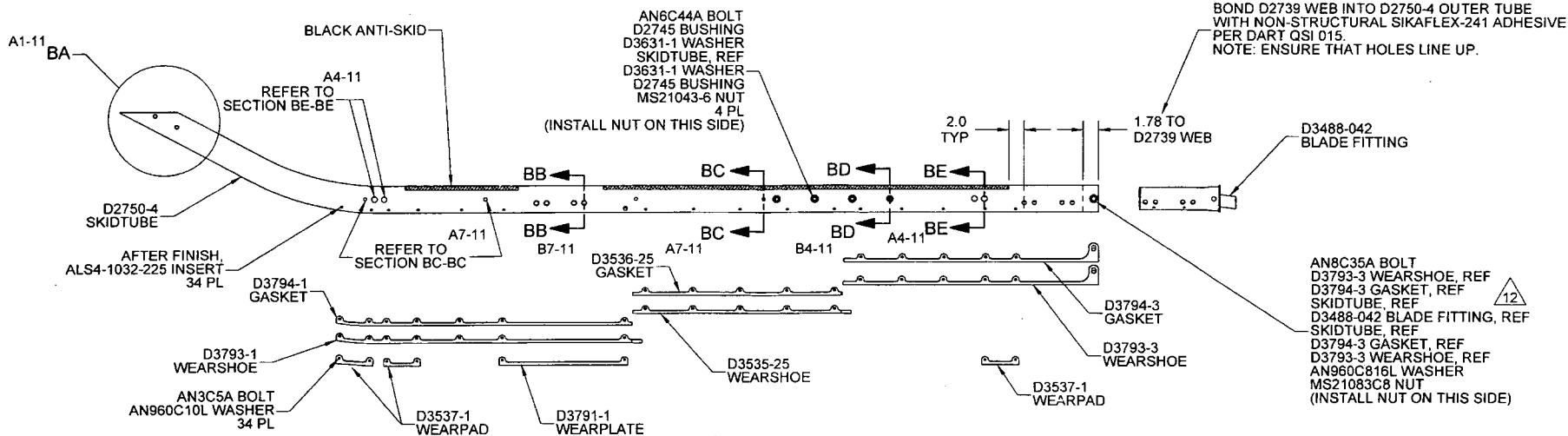
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

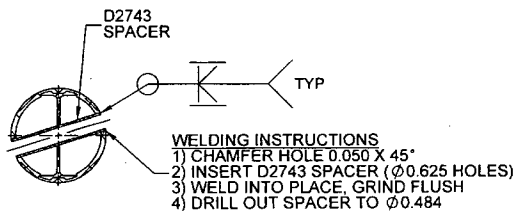
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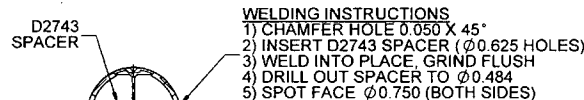
D2750-044 350 SKIDTUBE ASSEMBLY, RH

74109

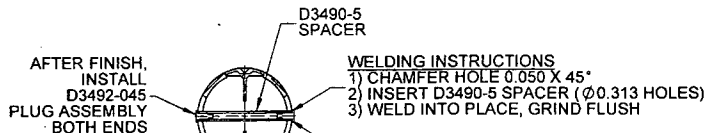
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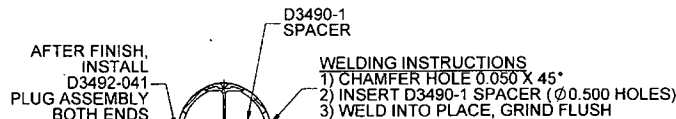
SECTION BB-BB
SCALE 3X, 4 PL



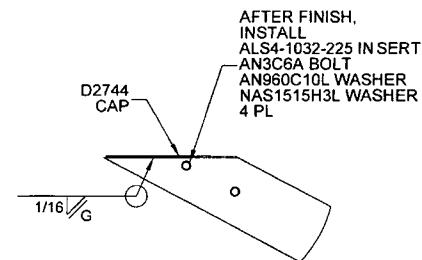
SECTION BD-BD
SCALE 3X, 4 PL
(HARDWARE REMOVED FOR CLARITY)



SECTION BC-BC
SCALE 3X, 4 PL



SECTION BE-BE
SCALE 3X, 4 PL



DETAIL BA
SCALE 2X

DESIGN	<i>[Signature]</i>	DART AEROSPACE USA, INC.	
DRAWN	<i>[Signature]</i>	PORT HADLOCK, WA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. F
MFG. APPR.	<i>[Signature]</i>	D2750	SHEET 11 OF 11
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	350 SKIDTUBE ASSEMBLY	NTS
DATE	08.07.16	COPYRIGHT © 1988 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

NO. 270

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Barclay Elliott
Job number: B 72821
Part number: D 350 636 D12
Description: 350 skid tube
Welding Process: Tig[☒] Mig[]
Base material: Alum
Current: AC[☒] DC[]

TEST REQUIREMENTS AND RESULTS

Visual: pass[☒] fail[]
Penetration: pass[☒] fail[]

UNACCEPTABLE

Cracks: pass[☒] fail[]
Undercut: pass[☒] fail[]
Pin holes: pass[☒] fail[]
Overlap (cold lap): pass[☒] fail[]
Porosity (surface): pass[☒] fail[]
Coloration: pass[☒] fail[]

Qualifier Pat Dunn Date of Test Coupon 11-10-07
Welder Barclay Elliott Date of Test Coupon 11-10-07

The above named individual is qualified in accordance with AWS D17.1.2001 to weld